

## **Perfusion anodophile biofilm electrodes (PABE) and their potential for computing**

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### **Abstract.**

This paper presents a theoretical approach to biological computing, using biofilm electrodes by illustrating a simplified Pavlovian learning model. The theory behind this approach was based on empirical data produced from a prototype version of these units, which illustrated high stability. The implementation of this system into the Pavlovian learning model, is one example and possibly a first step in illustrating, and at the same time discovering its potential as a computing processor.

**Keywords:** artificial intelligence, biological computing, neurone-like, transistor-like, unit and connected assemblies, Pavlovian association learning.